AFS16Z-30-22-30

Products → Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

General Information

Extended Product Type:	AFS16Z-30-22-30
Product ID:	1SBL176082R3022
EAN:	3471523158399
Catalog Description:	AFS16Z-30-22-30 24VDC Contactor
Long Description:	AFS09Z ... AFS38Z contactors are designed for machine safety application s. They are delivered with fixed front-mounted auxiliary contact blocks mak ing them ideal for monitoring and controlling circuits. Mechanically linked a nd mirror contacts make your system safer. - control circuit with electronic coil interface: - dedicated 24 V DC for direct control by PLC-output ≥ 250 m A, low holding consumption up to 1.7 W - reduced panel energy consumpti on - mirror and mechanically linked contacts, with front marked symbol ac c. to IEC60947-5-1, always guaranteeing the right contactor status - front-mounted auxiliary contact block: - permanently fixed - protective cover to p revent manual operation - yellow housing for easy identification - minimum switching capacity 12 V / 3 mA, with a failure rate 10-7 acc. to IEC 60947-5 -4 - built-in surge suppression

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

Instructions and Manuals:	1SBC101052M6801

Dimensions

Product Net Width:	45 mm
Product Net Depth / Length:	130.5 mm
Product Net Height:	86 mm

Technical

Number of Main Contacts NO:	3
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	2
Number of Auxiliary Contacts NC:	2
Standards:	IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N°14
Rated Operational Voltage:	Auxiliary Circuit 690 V Main Circuit 690 V

Rated Frequency (f):	Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th}):	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 35 A acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 30 A (690 V) 60 °C 30 A (690 V) 70 °C 26 A
Rated Operational Current AC-3 (I_e):	(220 / 230 / 240 V) 60 °C 18 A (380 / 400 V) 60 °C 18 A (415 V) 60 °C 18 A (440 V) 60 °C 18 A (500 V) 60 °C 15 A (690 V) 60 °C 10.5 A
Rated Operational Power AC-3 (P_e):	(220 / 230 / 240 V) 4 kW (380 / 400 V) 7.5 kW (400 V) 7.5 kW (415 V) 9 kW (440 V) 9 kW (500 V) 9 kW (690 V) 9 kW
Rated Operational Current AC-15 (I_e):	(220 / 240 V) 4 A (24 / 127 V) 6 A (400 / 440 V) 3 A (500 V) 2 A (690 V) 2 A
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 0.1 s 140 A for 1 s 100 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 106 A
Maximum Electrical Switching Frequency:	AC-1 600 cycles per hour AC-15 1200 cycles per hour AC-2 / AC-4 300 cycles per hour AC-3 1200 cycles per hour DC-13 900 cycles per hour

Rated Operational Current DC-13 (I_e):	(110 V) 0.55 A / 60 W (220 V) 0.27 A / 60 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W (125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W
Rated Insulation Voltage (U_i):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U_{imp}):	6 kV
Maximum Mechanical Switching Frequency:	3600 cycles per hour
Rated Control Circuit Voltage (U_c):	50 Hz - 60 Hz - DC Operation 24 V
Operate Time:	Between Coil De-energization and NC Contact Closing 22 … 57 ms Between Coil De-energization and NO Contact Opening 17 … 29 ms Between Coil Energization and NC Contact Opening 20 … 35 ms Between Coil Energization and NO Contact Closing 27 … 53 ms
Connecting Capacity Main Circuit:	Flexible with Insulated Ferrule 1x 0.75 ... 4 mm² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm² Flexible with Ferrule 1/2x 0.75 ... 6 mm² Rigid 1/2x 1 ... 6 mm²
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 1/2x 1 ... 2.5 mm²
Connecting Capacity Control Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 1/2x 1 ... 2.5 mm²
Wire Stripping Length:	Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 10 mm
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20
Terminal Type:	Screw Terminals

Environmental

Ambient Air Temperature:	Close to Contactor for Storage -60 ... +80 °C Close to Contactor Fitted with Thermal O/L Relay -25 ... +60 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C
Climatic Withstand:	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible:	3000 m
Resistance to Vibrations acc. to IEC 60068-2-6:	5 ... 300 Hz 4 g closed position / 2 g open position
Resistance to Shock acc. to IEC 60068-2-27:	Closed, Shock Direction: A 30 g Closed, Shock Direction: B1 25 g Closed, Shock Direction: B2 15 g Closed, Shock Direction: C1 25 g Closed, Shock Direction: C2 25 g

Technical UL/CSA

General Use Rating UL/CSA:	(600 V AC) 30 A
Tightening Torque UL/CSA:	Auxiliary Circuit 11 in·lb Control Circuit 11 in·lb Main Circuit 13 in·lb

Certificates and Declarations (Document Number)

CB Certificate:	CB_SE-80871M3
cUL Certificate:	UL_20180227_E312527_7_1
Declaration of Conformity - CE:	1SBD250022U1000
Instructions and Manuals:	1SBC101052M6801
UL Listing Card:	E312527

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	96 mm
Package Level 1 Depth / Length:	145 mm
Package Level 1 Height:	50 mm
Package Level 1 Gross Weight:	0.54 kg
Package Level 1 EAN:	3471523158399
Package Level 2 Units:	12 piece
Package Level 2 Width:	51 mm
Package Level 2 Depth / Length:	98 mm
Package Level 2 Height:	148 mm
Package Level 2 Gross Weight:	6.48 kg
Package Level 3 Units:	576 piece

Classifications

Object Classification Code:	Q
ETIM 4:	EC000066 - Magnet contactor, AC-switching
ETIM 5:	EC000066 - Magnet contactor, AC-switching
ETIM 6:	EC000066 - Power contactor, AC switching
ETIM 7:	EC000066 - Power contactor, AC switching

